

Sept 1

Dart Aerospace Ltd.

Date: Tuesday, 15/08/2006 7:19:50 AM
User: Linda Lacelle

Process Sheet

| | |
|---|--|
| Customer : CU-DAR001 Dart Helicopters Services | Drawing Name : STRUT WELDMENT ASS'Y |
| Job Number : 28184 | |
| Estimate Number : 10554 | |
| P.O. Number : N/A | Part Number : D34431 |
| This Issue : 15/08/2006 S.O. No. : N/A | Drawing Number : D3443 REV B |
| Prsht Rev. : NC | Project Number : N/A |
| First Issue : N/A Type : MACHINED PARTS | Drawing Revision : B |
| Previous Run : 27794 | Material : N/A |
| Written By : _____ | Due Date : 31/08/2006 Qty: 8 Um: Each |
| Checked & Approved By : _____ | |
| Comment : A 05.11.14 New issue EC | |

Additional Product

Job Number:



| Seq. #: | Machine Or Operation: | Description : |
|---------|-----------------------|---------------|
|---------|-----------------------|---------------|

| | | |
|-----|----------------|-------------|
| 1.0 | M174B2500X1250 | 17-4 SS BAR |
|-----|----------------|-------------|



Comment: Qty.: 0.2100 f(s)/Unit Total: 1.6800 f(s)
Material: 17-4 SS Bar 2.500" X 1.250"
(M17-4-B2.500x01.250)
Batch: M101422

adj.

J.G 06/08/16 18

| | | |
|-----|----------|----------|
| 2.0 | BAND SAW | BAND SAW |
|-----|----------|----------|



Comment: BAND SAW
Cut blank 2.400" long

J.G 06/08/16 18

| | | |
|-----|-------|--------------------------------|
| 3.0 | HAAS1 | HAAS CNC VERTICAL MACHINING #1 |
|-----|-------|--------------------------------|



Comment: HAAS CNC VERTICAL MACHINING #1
Machine as per Folio FA587 Rev: AA & Dwg D3443 Rev: B

J.F. 06/08/18 18

| | | |
|-----|-----|--|
| 4.0 | QC2 | INSPECT PARTS AS THEY COME OFF MACHINE |
|-----|-----|--|



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

J.F. 06/08/18 18

| | | |
|-----|-----|--------------|
| 5.0 | QC8 | SECOND CHECK |
|-----|-----|--------------|




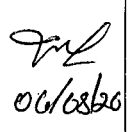

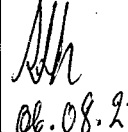
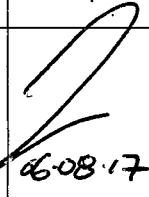

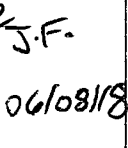
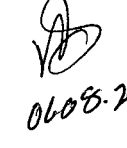
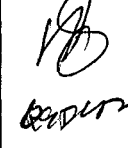
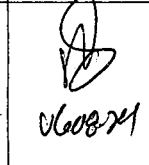
Comment: SECOND CHECK

SA 06.08.18 18

Dart Aerospace Ltd

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: D3443-1 PAR #: N/A Fault Category: Prod - mach. NCR: Yes No DQA: Date: 06.08.24
 QA: N/C Closed: Date: 06.08.24

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|----------|------|---|---|---|---|---|---|---|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| 06/08/16 | 3 | 1 piece too The measured .342 ± .002 too small .331. |  | - Adjust tool cut depth. Part acceptable. |  06/08/20 |  06-08-17 |  06.08.21 |  06-08-17 |
| 06/08/18 | 3 | 3 piece are scrap because the origine "y" of the machine move of .236" |  | - I took new origine in "y" for all the operation. pieces has been replaced. |  06/08/18 |  06-08-21 |  06-08-21 |  06-08-21 |
| | | | | | | | | |

NOTE: Date & initial all entries

Date: Tuesday, 15/08/2006 7:19:50 AM
User: Linda Lacelle

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: STRUT WELDMENT ASS'Y

Job Number: 28184

Part Number: D34431

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

HAAS1

HAAS CNC VERTICAL MACHINING #1



Comment: HAAS CNC VERTICAL MACHINING #1

~~HAAS~~ deburr per dwg D3443

J.F. 06/08/22 (10)

7.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

06-08-22 10

8.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: ST437

AS 06/08/22 (10)

9.0

DC

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Inspection Level 21

06.08.24

Job Completion



U 060823

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

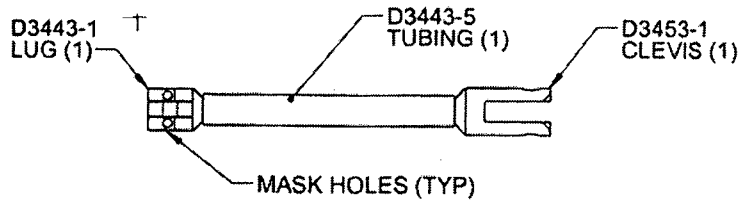
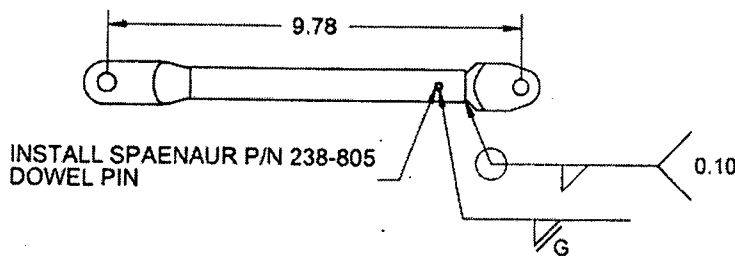
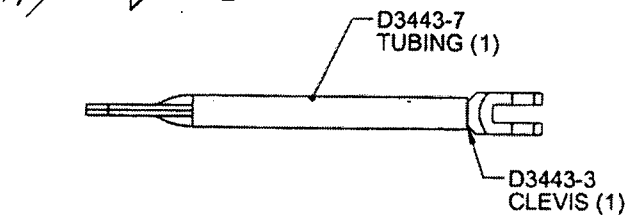
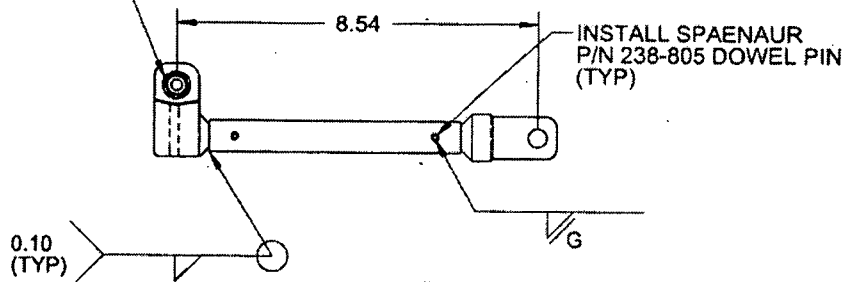
QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

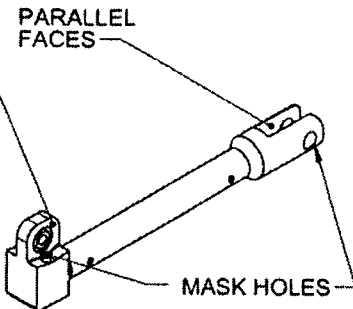
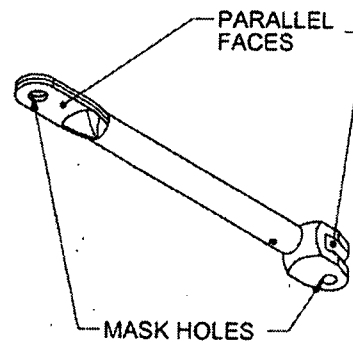
NOTE: Date & initial all entries

DART

| | | | |
|-------------------------|-------------------|--|------------------------|
| DESIGN RF | DRAWN BY RF | DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA | |
| CHECKED <i>H</i> | APPROVED <i>H</i> | DRAWING NO. D3443 | REV. B SHEET 1 OF 3 |
| DATE 05.12.05 | | TITLE STRUT WELDMENT ASSEMBLY | SCALE 1:4 |
| A | 05.09.02 | NEW ISSUE | |
| B | 05.12.05 | ADDED -9 PIN; REMOVED BALL PLUNGER; REVISE TOLERANCE; & $\varnothing 0.125$ WAS #30 | |

RELEASED05.12.09 *H*PRESS FIT McMASTER-CARR P/N 63215K32
BALL JOINT BEARING AFTER POWDER COATINSTALL SPAENAU P/N 238-805
DOWEL PIN**NOTES:**

- 1) WELD PER DART QSI 004
- 2) FINISH: POWDER COAT WHITE (4.3.5.2) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) IDENTIFY WITH DART P/N USING FINE POINT PERMANENT INK MARKER

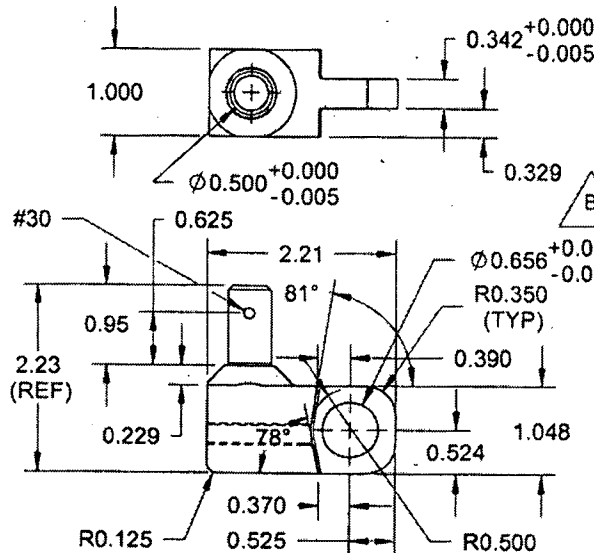
**D3443-041****REFERENCE ONLY****D3443-043**

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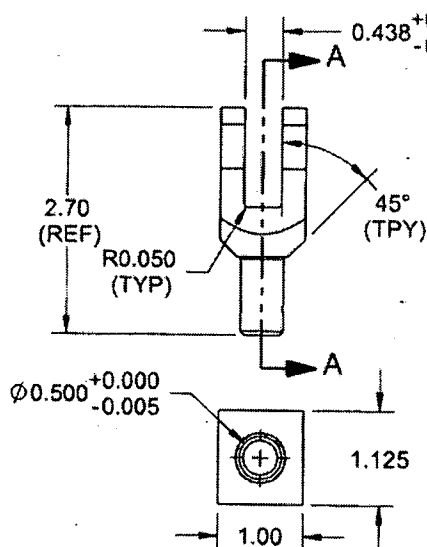
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DART

| | | | |
|-------------------------|----------------|--|------------------------|
| DESIGN RF | DRAWN BY RF | DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA | |
| CHECKED # | APPROVED # | DRAWING NO. D3443 | REV. B SHEET 2 OF 3 |
| DATE 05.12.05 | | TITLE STRUT WELDMENT ASSEMBLY | SCALE 1:2 |

**D3443-1 LUG****D3443-1 NOTES:**

- 1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC M17-4B)

**SECTION A-A****D3443-3 CLEVIS****D3443-3 NOTES:**

- 1) MATERIAL: AISI 304 SS ROUND BAR (REF. DART SPEC M304R)

GENERAL NOTES:

- 2) FINISH: NONE
3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
4) ALL DIMENSIONS ARE IN INCHES
5) BREAK ALL UNMARKED SHARP EDGES 0.005 TO 0.010

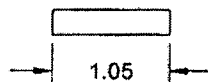
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| | | | |
|------------------|----------------|--|------------------------|
| DESIGN RF | DRAWN BY RF | DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA | |
| CHECKED # | APPROVED # | DRAWING NO. D3443 | REV. B SHEET 3 OF 3 |
| DATE 05.12.05 | | TITLE STRUT WELDMENT ASSEMBLY | SCALE 1:2 |

$\phi 0.210^{+0.005}_{-0.010}$



D3443-9 PIN

D3443-9 NOTES:

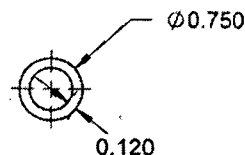
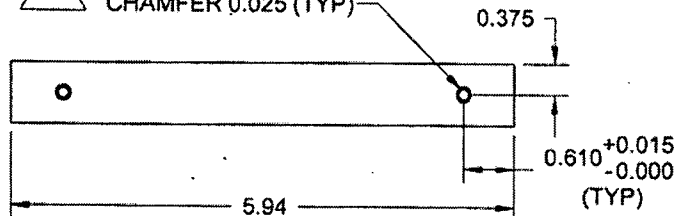
- 1) MATERIAL: DELRIN II 150R OR ACETRON GP ACETAIL (REF. DART SPEC M-DELRIN-R)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES

RELEASED

05.12.09

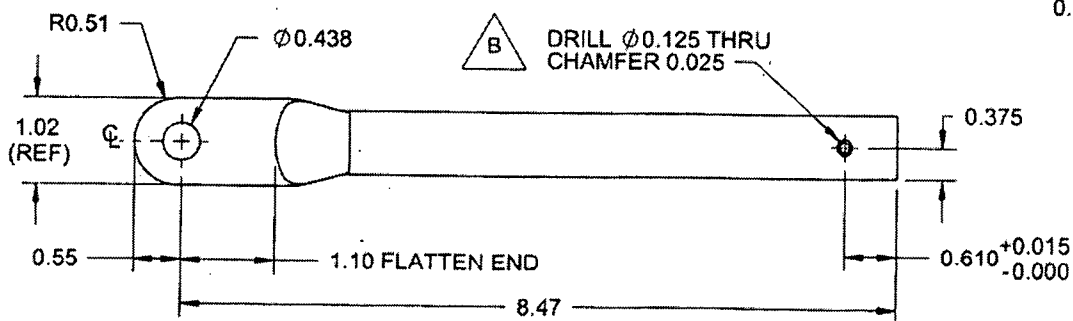
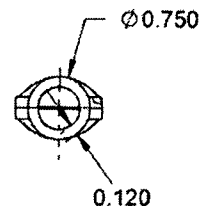
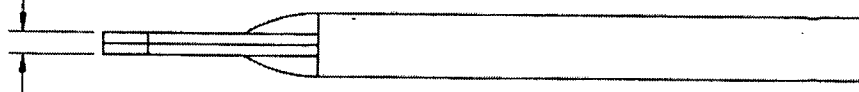


DRILL $\phi 0.125$ THRU
CHAMFER 0.025 (TYP)



D3443-5 TUBING

$0.260^{+0.000}_{-0.030}$



D3443-7 TUBING

D3443-5/-7 NOTES:

- 1) MATERIAL: AISI 316/304 SS SEAMLESS TUBING (REF. DART SPEC M304TR0.7500W.120)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL UNMARKED SHARP EDGES 0.005 TO 0.025

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| | | |
|--------------------|--------|----------------------|
| DART AEROSPACE LTD | | Work Order: 28184 |
| Description: | | Part Number: 03443-1 |
| Inspection Dwg: | Rev: B | Page 1 of 1 |

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

| Drawing Dimension | Tolerance | Actual Dimension | Accept | Reject | Method of Inspection | Comments |
|-------------------|-------------|------------------|--------|--------|----------------------|----------|
| 1.000" | $\pm .010"$ | 1.005" | ✓ | | | |
| .342" | $\pm .005"$ | .338" | ✓ | | | |
| .329" | $\pm .010"$ | | ✓ | | | |
| Ø .500" | $\pm .005"$ | .500" | ✓ | | | |
| .625" | $\pm .010"$ | .625" | ✓ | | | |
| .95" | $\pm .030"$ | .949" | ✓ | | | |
| 2.23" | $\pm .030"$ | 2.230" | ✓ | | | |
| .229" | $\pm .010"$ | .229" | ✓ | | | |
| 2.21" | $\pm .030"$ | 2.213" | ✓ | | | |
| Ø .656" | $\pm .005"$ | Ø .656" | ✓ | | | |
| .390" | $\pm .010"$ | .383" | ✓ | | | |
| .524" | $\pm .010"$ | .524" | ✓ | | | |
| 1.048" | $\pm .010"$ | 1.049" | ✓ | | | |
| .370" | $\pm .010"$ | .367" | ✓ | | | |
| .525" | $\pm .010"$ | .524" | ✓ | | | |
| .050" x 45° | $\pm .030"$ | .050" x 45° | ✓ | | | |
| .470" | $\pm .010"$ | .471" | ✓ | | | |
| .165" | $\pm .010"$ | .167" | ✓ | | | |
| 1/4-28unf | | 1/4-28unf | ✓ | | | |
| Ø .1285" | $\pm .005"$ | Ø .131" | ✓ | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

| | | |
|-------------------|------------------|---------------------|
| Measured by: J.F. | Audited by: J.G. | Prototype Approval: |
| Date: 06/08/17 | Date: 06/08/17 | Date: |

| Rev | Date | Change | Revised by | Approved |
|-----|------|-----------|------------|----------|
| A | | New Issue | KJ/RF | |